DOCUMENT RESUME

ED 440 967 SP 039 204

AUTHOR	Bogler, Ronit
TITLE	Two Profiles of Schoolteachers: A Discriminant Analysis of Job Satisfaction.
PUB DATE	2000-04-00
NOTE	21p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24-28, 2000).
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Attitude Measures; Elementary Secondary Education; Foreign Countries; *Job Satisfaction; *Leadership Qualities; *Principals; Sex Differences; Teacher Administrator Relationship; *Teacher Attitudes; Teachers
IDENTIFIERS	Israel; Transactional Leadership; Transformational Leadership

ABSTRACT

This study investigated factors that could discriminate between teachers with high levels of job satisfaction (HS) and teachers with low levels of job satisfaction (LS). A self-report questionnaire was administered to 930 teachers in schools in northern Israel in 1997. Respondents were instructed to refer to their current school principal when answering questions about principal leadership style, teachers' perceptions of their occupation, and teachers' satisfaction according to various work-related factors. The survey also collected background information through a set of questions about organizational and personal characteristics. A total of 745 teachers returned usable questionnaires. Out of those 745, 116 were categorized as LS teachers and 106 as HS teachers. Data analysis delineated the characteristics of the LS and HS teachers. Results indicate that LS teachers were mostly male, taught in large schools in the city, perceived their principal to be a transactional leader, and did not view their teaching job as a profession. The HS teachers were mostly female and Jewish, were from large schools, perceived their principal to be a transformational leader, and viewed their teaching job as a profession. (Contains 19 references.) (SM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 440 967

Two Profiles of Schoolteachers:

A Discriminant Analysis of Job Satisfaction

Ronit Bogler
Dept. of Education & Psychology
The Open University of Israel
P.O.B. 39328
Tel Aviv 61392, Israel
e-mail: ronitbo@oumail.openu.ac.il

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

R. Bogler

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Paper presented at the annual meeting of the American Educational Research Association

New Orleans, Louisiana
April 2000

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SP039204

BEST COPY AVAILABLE

INTRODUCTION

What are the characteristics of a teacher with a high level of satisfaction (HS) and one with a low level of satisfaction (LS)? Does each type of teacher have a different profile of attributes? In this study, I attempt to pinpoint the predictors that discriminate between LS teachers and HS teachers. The unique contribution of this work is in its endeavor to characterize each category of the teachers by various characteristics related to principals' leadership styles and to background variables. If we are able to identify the importance of each factor in determining membership within each category (LS and HS), the model should be able to use these factors to "discriminate" between teachers likely to be highly satisfied in their job and those likely to have low level of job satisfaction.

TEACHER JOB SATISFACTION

Teacher job satisfaction has been studied as an overall construct and as a facet construct (Holdaway, 1978). In his research Holdaway found that the overall satisfaction was closely related to "working with students, societal attitudes, status of teachers, recognition, and achievement" (p. 46). Zigarelli (1996) too referred to teacher job satisfaction as a single, general measure that is a statistically significant predictor of effective schools. Evans (1997), who addressed problems of conceptualization and construct validity of teachers' job satisfaction, presented a critical view on this subject. She argued that the source of the concept's ambiguity is rooted in the distinction between "satisfactory" and "satisfying". The lack of a clear distinction between the two terms results in problems of construct validity in this field of study. Evans' suggested solving this ambiguity by reconceptualizing "job

satisfaction", in terms of two constituents: job fulfillment and job comfort. The first term, job fulfillment, refers to one's assessment of how well the job is performed, assuming that achievements enhance job-related and achievement-related satisfaction. The second term, job comfort, relates to the degree to which one is satisfied with the conditions and the state of affairs of his or her work. In the current study, teachers' job satisfaction is examined using both constituents because the emphasis is on the global notion of this concept.

Relatively few studies on teachers' job satisfaction have examined the relationship between teachers' demographic and background characteristics and their satisfaction. Plihal (1981), for example, found that a teacher's years of experience was positively correlated with intrinsic rewards conceptualized by the importance attached to "reaching students" (p. 6). With regard to school location, rural teachers were found to be less satisfied (e.g., Haughey & Murphy, 1984) compared to suburban teachers (Ruhl-Smith, 1991). Still, the empirical evidence about the background attributes of teachers is relatively limited. In a study conducted by the National Center for Education Statistics (NCES) (1997) on job satisfaction among American teachers, it was found that workplace conditions were related to job satisfaction. The workplace conditions refer to administrative support and leadership, student behavior and school atmosphere, and teacher autonomy, all of which are open to policy. Teachers reported on greater satisfaction when their working conditions were more favorable.

In addition, certain background variables and school characteristics were found to be weakly associated with teacher satisfaction. For example, female teachers were more satisfied than male teachers were, and teachers with less experience reported on

greater satisfaction than teachers with more experience. Private school teachers were more satisfied than public school teachers were. In the latter type of schools, teachers who were young and less experienced in their work were found as more satisfied than older and more experienced teachers. In private schools, a bipolar situation was revealed: highest levels of job satisfaction were found among the youngest and oldest teachers and among the least and most experienced ones.

The NCES report was based on a large and comprehensive database encompassing both elementary and secondary schools, and teachers and principals in private and public schools in the United States. It analyzed the 1993-1994 Schools and Staffing Survey (SASS) data collected by the NCES that looked at a wide range of schools, teachers and work characteristics. Though the NCES report is very comprehensive, it is only one report, and very few other studies have been conducted on this topic. All things considered, empirical work on background and demographic attributes of teachers has been relatively limited. Hence, in this study, I will aim to investigate how such attributes affect HS teachers as compared with how they affect LS teachers.

Research on teacher job satisfaction has mainly focused on the effects of exogenous variables such as principal's leadership style and strategies of decision-making on the contentment of teachers and the rate of teacher burnout from this occupation (Kirby, Paradise & King, 1992; Koh, Steers & Terborg, 1995; Silins, 1992). The researchers strive to identify the factors that best predict teacher job satisfaction and to test for significant differences among a number of satisfaction subscales. Therefore, regression analyses and multivariate analysis of variance (manova) are frequently used to accomplish these two goals, respectively.

As stated above, the present study is aimed at identifying the organizational and personal variables that contribute the most to the model that discriminates between the LS and HS teachers. Among the organizational variables are school size, school level (elementary, middle school or high school), and school location (e.g., city or village). Among the personal variables are gender, religion (Jewish or Muslim), seniority, age, birthplace, and parents' birthplace.

METHOD

RESEARCH INSTRUMENT

A self-report questionnaire was administered in 1997 to 930 teachers in schools located in the northern part of Israel. The respondents were instructed to refer to their current school principal, and to fill out a questionnaire that asked a range of questions about the principal's leadership style, the teachers' perceptions of their occupation, and their satisfaction from various issues related to the school work. In addition, background information was collected through a set of questions about organizational and personal characteristics.

The question regarding *teacher satisfaction* was taken from a questionnaire on job satisfaction of principals' and teachers, that had previously been administered and validated (Tarabeh, 1995). This is a 25-item question with a seven-point Likert scale. In his work on an Israeli sample of teachers, Tarabeh had identified four dimensions describing teachers' satisfaction: fulfillment of expectations; guidance and assistance

from the Ministry of Education; internal conditions of work; and relationship with students and parents. Some of these categories, such as esteem, growth, and social relations with others, were identified in Wanous and Lawler's work (1972). In this study, respondents were asked to indicate the frequency in which they felt satisfied in various areas such as cooperation with other teachers, student achievement, support of supervisors, physical conditions of the school, and school budget.

The question about *transformational and transactional leadership* was taken from the Multifactor Leadership Questionnaire (MLQ) (Bass, 1985). The questionnaire was translated to Hebrew and adapted to the Israeli milieu. The respondents were asked to rate, on a five-point scale, their principal's leadership style, according to the three categories of transformational leadership (charisma/inspiration, personal consideration, and intellectual stimulation), and the two categories of transactional leadership (contingent reward and management by exception). A sample of items that represents transformational leadership includes the following: "principal projects himself/herself as a role model"; "principal displays talent and ability to cope with decision-making"; "principal presents new challenges and projects"; and "principal believes in the teachers' ability to deal with obstacles". A sample of items representing transactional leadership includes "principal focuses his/her attention on finding exceptions, deviations and weaknesses in teachers"; "principal does not hesitate to remark on mistakes and errors that call for his/her intervention"; "principal tells staff members what to do in order to receive rewards for the efforts"; and "principal doesn't bother the teachers if they don't bother him/her".

The question regarding *teachers' occupation perception* was measured by an itemized question about various facets of the teaching occupation (Yaniv, 1982), and included such factors as perceived status, perceived occupation, professional identity, perceived autonomy and professional competence. This question presented items such as the following: "my line of work provides me with a high status"; "there are always promotion opportunities for a talented teacher"; "I feel free to try new ideas and teaching techniques in the classes that I teach"; and " teaching gives me the feeling that I can change people".

Principal component analysis with varimax rotation was performed on each of the study variables on a sample of the respondents. This procedure was used to test for scale validity. Since in the current study emphasis has been given to the global effects of the variables, an overall scale was constructed for each of the predicting factors: transformational leadership, transactional leadership, and teacher's occupation perception. For each factor, the reliability measure, Cronbach's alpha, was calculated (see the Appendix).

Background variables included items about organizational and personal attributes. The questionnaire was pre-tested on a group of 35 teachers. After incorporating a number of changes (e.g., clarifying statements and omitting items that were ambiguous), and a retest on five more teachers, the revised questionnaire was finalized.

SAMPLE

From a sample of 930 teachers, 745 responded and returned usable questionnaires (80% return rate). They taught in elementary (51%) middle (20%) and high schools (26%) in the northern part of Israel. Sixty-six per cent of the respondents were women. Of all the respondents, 62% were Jews and the rest non-Jews (mostly Muslims). Amongst the Jewish teachers, almost 90% were female, while the majority of the non-Jewish teachers (70%) were male.

RESULTS

At first, teachers' job satisfaction was investigated in order to identify the LS and HS teachers. Based on the variable distribution (ranging from 1 to 7), the low level of satisfaction was determined as equal to or smaller than 3.72 (15.7%), and the high level of satisfaction was set as equal to or greater than 5.80 (14.3%). Consequently, 222 respondents (30% of the total number of respondents) were included in the analysis, consisting of 116 (52.3%) LS teachers and 106 (47.7%) HS teachers.

Secondly, statistical differences were tested between low and high levels of teachers' job satisfaction in relation to the predictors. The Chi-square test was used for the nominal variables, and the t-test was applied for the continuous variables. Based on these tests, it was determined which of the variables discriminated between low and high levels of satisfaction. The variables that showed differences between low and high levels of teacher job satisfaction were teacher's occupation perception, principals' transformational leadership, principals' transactional leadership, school level, gender, religion, and the birthplace of the teacher's father. Lastly, a discriminant

BEST COPY AVAILABLE

analysis was conducted to predict group membership from a set of the statistically significant predictors. A discriminant analysis assesses whether or not a set of variables discriminates between two groups of individuals. Table 1 presents the results of the discriminant analysis.

<Table 1 about here>

One method of assessing the importance of a particular variable is to look at its discriminant function coefficient. Discriminant analysis produces discriminant function coefficients for each predicting variable. The coefficients are standardized to remove the effects of differing means and standard deviations in the predicting variables. The signs of the coefficients in the discriminant analysis have no special meaning because the dependent variable, teacher job satisfaction, is treated as a nominal variable, and there is no meaning to positive or negative associations. As shown in Table 1, the variable with the largest effect on job satisfaction is teacher's occupation perception (.769), followed by principal's leadership style, transformational or transactional (.672 and -.230, respectively).

Discriminant analysis maximizes the between-groups differences on discriminant scores and minimizes the within-groups differences. The eigenvalue is one statistic for evaluating the magnitude of a discriminant analysis. In the present analysis, the eigenvalue was very high (2.256). It implies that the between-groups differences are much greater than the within-groups differences. Wilks' lambda indicates how good the discriminating power of the model is. Therefore, this measure is a reflective of the variables' importance: the lower the value of Wilks' lambda the higher the percent of

explained variance of the dependent variable since the percent of explained variance is calculated as [1-(Wilks' lambda)]•100. In our analysis, teacher's occupation perception indicates that differences between LS and HS teachers account for 58 percent of this variable variance. Wilks' lambda, in the case where all the functions are in the analysis (.30), points that differences between the two groups of satisfied teachers account for 70 percent of the variance in the predicting variables. The high value and the significance of the chi-square imply that the discriminant functions discriminate very well between LS and HS teachers. The discriminant analysis also revealed that for both the LS and HS teachers, high percentage of the cases were correctly classified (95% and 93%, respectively). Overall, 94% of the original cases were correctly classified.

The differences between the LS and HS teachers with regard to the predicting variables (teachers' occupation perceptions, principals' leadership styles and background variables) that were found statistically significant are described in Tables 2 and 3. Table 2 provides the results of the chi-square test and Table 3 presents the results of the t-test.

<Tables 2 and 3 about here>

The data analyses revealed two different profiles of LS and HS teachers: teachers who were classified as having low satisfaction were: male, taught in large schools (with over 400 students), in the city. They perceived their principal as more transactional and less transformational, and did not view their teaching occupation as professional (as compared to HS teachers). The teachers who were classified as highly satisfied

from their job were: female, Jewish, and taught in large schools. They perceived their principal as more transformational and less transactional, and viewed their occupation as a profession. It should be noted that among the teachers who taught grades 1-3, almost 25% reported a high level of satisfaction from the job as compared to the percent who reported a low level, 12.4%. Among the high school teachers, 36.3% reported a low level of satisfaction as compared to only 16.2% who reported a high level. With regard to the birthplace of the teachers' fathers the data reveal that among the respondents whose fathers were not born in Israel 99% were Jews. Among the respondents whose fathers were born in Israel, 75% were non-Jews. Since these results actually reflect the teachers' religions rather than their fathers' birthplaces, utmost care is obligatory in interpreting them. Background characteristics that did not show statistical significance include teacher's age, seniority at work, and education.

DISCUSSION

The data analyses delineated the characteristics of the LS teachers and the HS teachers. The results suggest that LS were mostly male, taught in large schools in the city, perceived their principal as a transactional leader, and did not view their teaching job as a profession. The HS teachers were mainly female, Jewish, taught in large schools, perceived their principal as a transformational leader, and viewed their teaching job as a profession.

The findings of this study support the NCES findings (1997) regarding the weak association between individual and school characteristics and teacher job satisfaction. As indicated in the NCES report, "certain teacher background variables and school characteristics are only weakly related to teacher satisfaction, and they are not nearly

as useful in predicting a teacher's satisfaction with teaching as a career" (p. 51). Nevertheless, female teachers who taught in elementary schools were found in the large-scale NCES survey as more satisfied in their job than male teachers, as revealed also in the present study on a sample of Israeli teachers. The current work has thus confirmed the relatively low degree of importance attached to demographic and background variables as compared to the contribution of other variables such as teachers' perceptions of their occupation and of their principals' leadership styles. This conclusion supports other research that found that teacher job satisfaction is positively related to participative decision-making and to transformational leadership (Bogler, 1999; Kirby, Paradise & King, 1992; Koh, Steers & Terborg, 1995; Rossmiller, 1992; and Silins, 1992). With regard to teacher's occupation perception, it was found that teachers were most satisfied with the feeling of personal development (Dinham & Scott, 1998), and that perceived autonomy in the classroom was positively correlated with job satisfaction (Kreis & Brockoff, 1986).

IMPLICATIONS

The findings of this research have important implications for both principals and teachers. Principals need to be aware of the effect teachers' perceptions of their occupation has on their level of job satisfaction. Teacher's occupation perception is positively associated with teacher effectiveness, and the latter influences student achievement. Principals should, in addition, consider adopting a leadership style that would contribute to teachers' satisfaction, as teachers expressed a higher level of satisfaction when they perceived their principal as a transformational leader. Personal and school characteristics are another set of factors that principals need to take into account. They should pay extra attention to male teachers working in large schools in

BEST COPY AVAILABLE

the city who were found to be at the low level of job satisfaction. Teachers, on the other hand, need to heed the findings of this study in order to suit their expectations from the job to the reality they might be faced with.

This portrayal of the more and less satisfied teachers reflects the Israeli teaching milieu; it would be interesting and undoubtedly rewarding to conduct a cross-cultural study to compare the profiles of teachers with different levels of satisfaction in other, and different, countries. The present research adds another brick to the edifice of knowledge on teacher's job satisfaction by investigating it from another angle, that which delineates the attributes of teachers with low and high levels of job satisfaction.

REFERENCES

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

Bogler R. (1999). *The relationship between principals' leadership style, teacher professionalism and teachers' satisfaction*. Paper presented at the annual meeting of the American Educational Research Association, Montréal.

Choy, S.P., Bobbitt, S.A., Henke, R.R., Medrich, E.A., Horn, L.J., & Lieberman, J. (1993). *America's teachers: Profile of a profession*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, NCES 93-025.

Dinham, S. & Scott, C. (1998). A three domain model of teacher and school executive career satisfaction. *Journal of Educational Administration*, 36(4), 362-378.

Evans, L. (1997). Addressing problems of conceptualization and construct validity in researching teachers' job satisfaction. *Educational Research*, 39(3), 319-331.

Haughey, M. L. & Murphy P. J. (1984). Are rural teachers satisfied with the quality of their work life? *Education*, 104, 56-66.

Holdaway E. A. (1978). Facet and overall satisfaction of teachers. *Educational Administration Quarterly*, 14(1), 30-47.

Kirby, P. C., Paradise, L. V. & King, M. I. (1992). Extraordinary leaders in education: understanding transformational leadership. *Journal of Educational Research*, 85(5), 303-311.

Koh, W. L., Steers, R. M. & Terborg, J. R. (1995). The effects of transformational leadership on teacher attitudes and student performance in Singapore. *Journal of Organizational Behavior*, 16(4), 319-333.

Kreis, K. & Brockoff, D. Y. (1986). Autonomy: A component of teacher job satisfaction. *Education*, 107(1), 110-115.

National Center for Education Statistics (1997). *Job satisfaction among America's teachers: Effects of workplace conditions, background characteristics, and teacher compensation*. Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education.

Plihal, J. (1982). *Types of intrinsic rewards of teaching and their relation to teacher characteristics and variables in the work setting*. Paper presented at the annual meeting of the American Educational Research Association, New York.

Rossmiller, R.A. (1992). The secondary school principal and teachers' quality of work life. *Educational Management and Administration*, 20(3), 132-146.

BEST COPY AVAILABLE

Ruhl-Smith, C. D. (1991). *Teacher attitudes toward students: Implications for job satisfaction in a sample of elementary teachers from suburban schools*. Unpublished doctoral dissertation, Miami University, Oxford, OH.

Silins, H. C. (1992). Effective leadership for school reform. *The Alberta Journal of Educational Research*, 38(4), 317-334.

Tarabeh, H. (1995). *Principals' and teachers' job satisfaction as a function of the gap between principal's perception and teacher's perception of the principal's role*. Unpublished Master's thesis, University of Haifa, Israel. (Hebrew)

Wanous, J. P. and Lawler, E. E. 1972. Measurement and meaning of job satisfaction. *Journal of Applied Psychology*, 56, 95-105.

Yaniv, B. (1982). *Revealing factors that contribute to teacher dropout*. Unpublished Master's thesis, University of Haifa, Israel. (Hebrew).

Zigarreli, M.A. (1996). An empirical test of conclusions from effective schools research. *The Journal of Educational Research*, 90(2), 103-109.

Table 1. Discriminant analysis of teacher's job satisfaction

Predictor	Canonical Discriminant Function	Wilks' lambda
Teacher's occupation perception	.769	.422
Principal's transformational leadership	.672	.489
Principal's transactional leadership	-.230	.890
Father's birth place	-.163	.942
Gender	.160	.944
School level	-.158	.945
Religion	-.129	.963

The results for the canonical discriminant function were:

Eigenvalue = 2.256;

Wilks' lambda = .301 (R^2 = .70);

Chi-square = 244.755; df = 7; p = .0001

BEST COPY AVAILABLE

Table 2. Background variables

by teacher's job satisfaction

Predictor		*LS* *n* (%)	*HS* *n* (%)	χ^2
Gender	Male	64 (55.2)	35 (33.0)	
	Female	52 (44.8)	71 (67.0)	11.12**
Religion	Jew	57 (49.6)	71 (67.6)	
	Non Jew	58 (50.4)	34 (32.4)	7.41**
School size				
	400 students or less	28 (26.4)	38 (39.6)	
	More than 400 students	78 (73.6)	58 (60.4)	3.98*
School location				
	Rural	38 (33)	52 (49.1)	
	City	77 (67)	54 (50.9)	5.88*
Teaching level				
	Any grades except 1-3	99 (87.6)	79 (75.2)	
	Grades 1-3	14 (12.4)	26 (24.8)	5.61*
School level				
	Not a high school	72 (63.7)	88 (83.8)	
	A high school	41 (36.3)	17 (16.2)	11.54***

* $p < .05$
** $p < .01$
*** $p < .001$

Table 3. Means and standard deviations on background variables by teacher's job satisfaction

Predictor	*LS* *M* *(SD)*	*n*	*HS* *M* *(SD)*	*n*	*t*
Principal's transform. leadership[1]	2.92 (.79)	116	4.29 (.52)	106	-15.36***
Principal's transact. leadership[1]	2.63 (.61)	116	2.15 (.81)	106	5.06***
Teacher's occupation perception[2]	2.56 (5.42)	116	3.77 (.48)	106	-17.64***

*** $p < .001$

[1] Range: 1-5 (5 = very typical of my principal)

[2] Range: 1-5 (5 = strongly agree)

APPENDIX

Reliability indices, means, and standard deviations of the study scales

	Alpha	Mean	*SD*
Teacher's satisfaction (25 items)	.96	117.41	24.87
Transformational leadership (17 items)	.94	61.55	12.89
Transactional leadership (10 items)	.77	23.38	6.73
Teacher's occupation perception (28 items)	.93	89.27	16.94